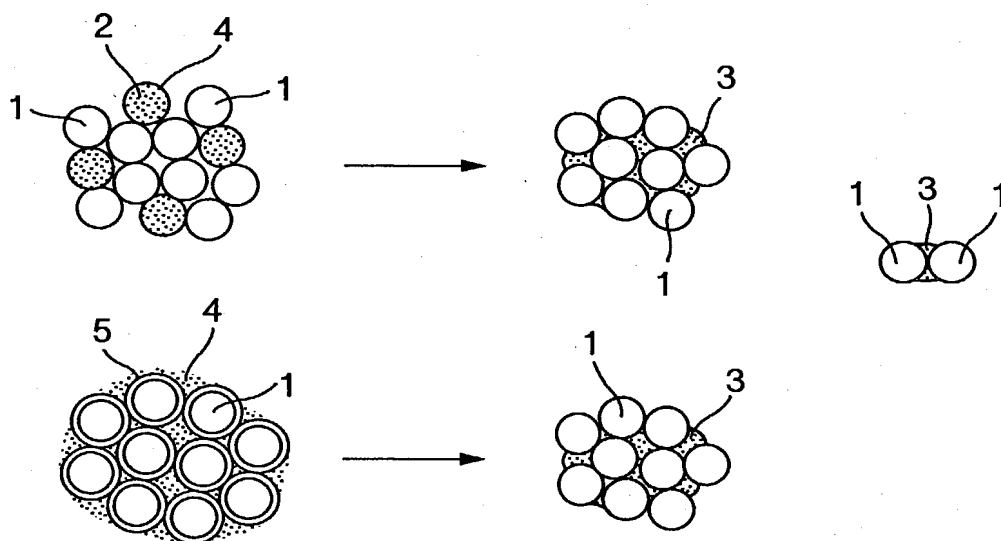


FIG.1



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FIG. 2

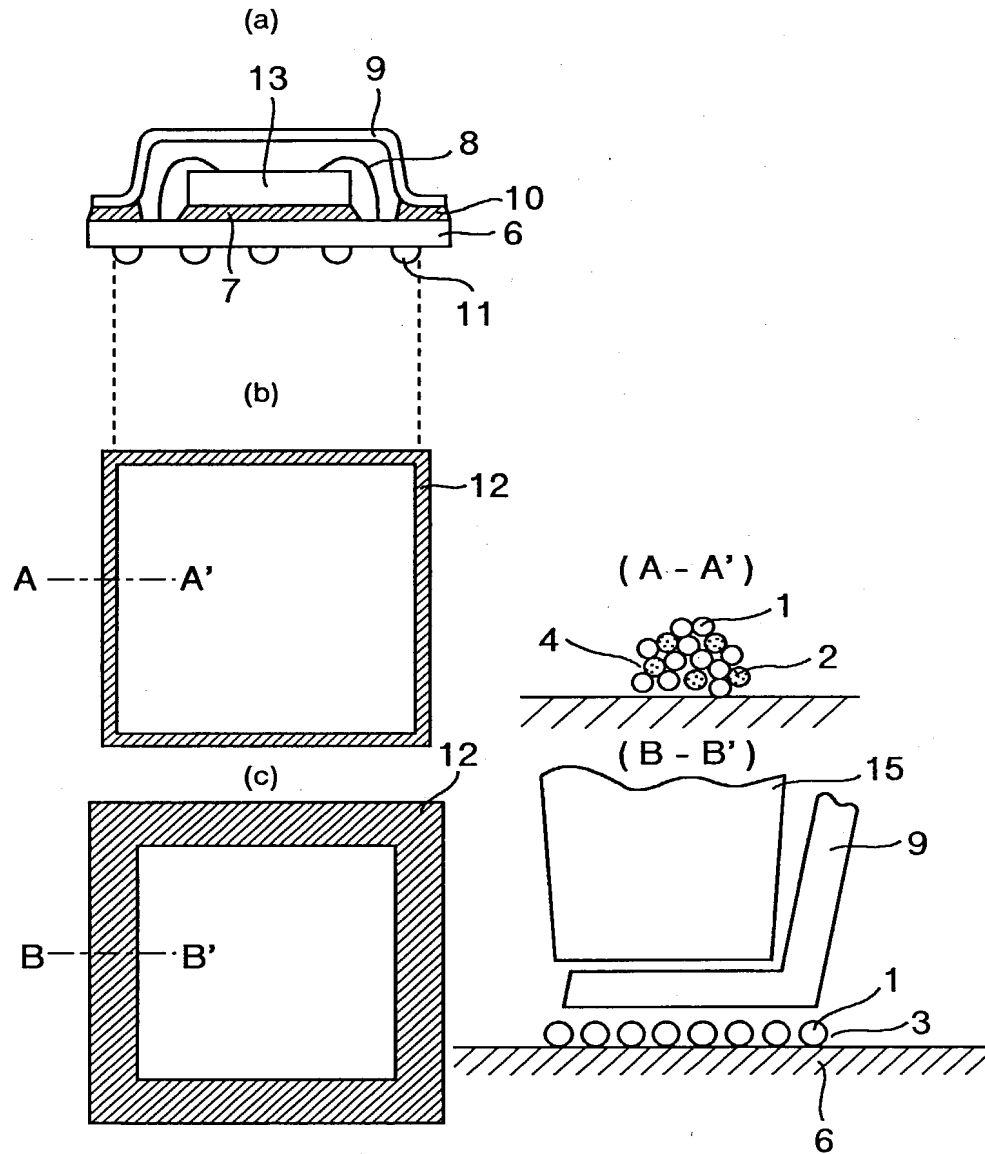
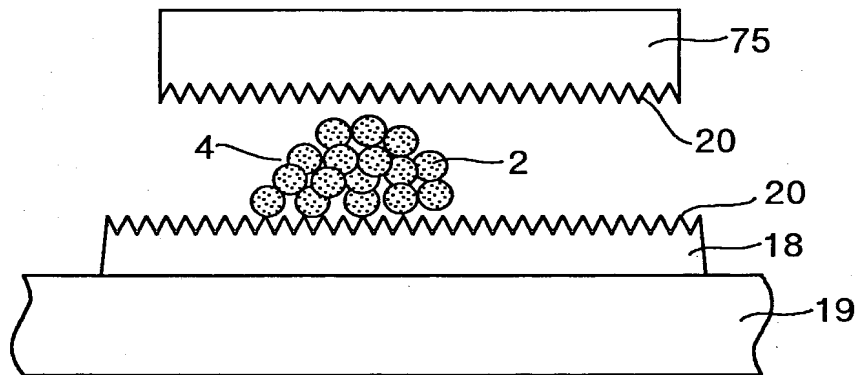
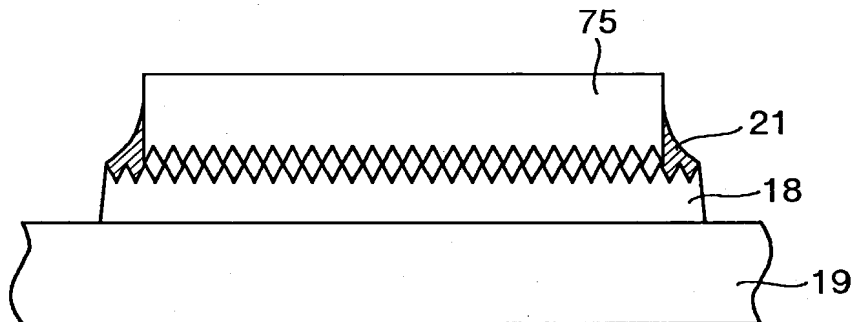


FIG.3

(a)



(b)



Applicant: Tasao Soga, et al.

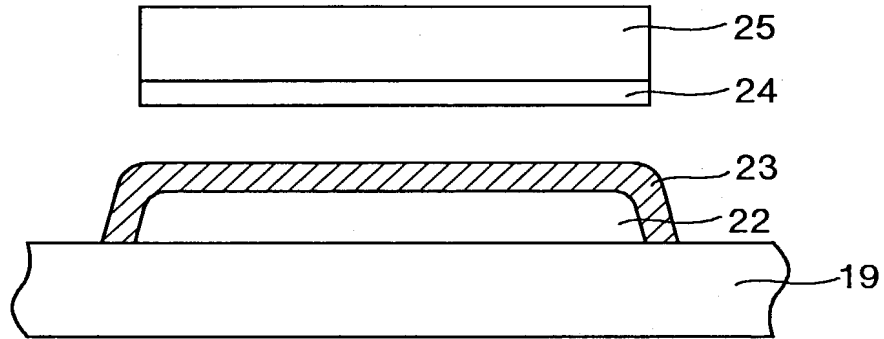
Title: Electronic Device

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FIG.4



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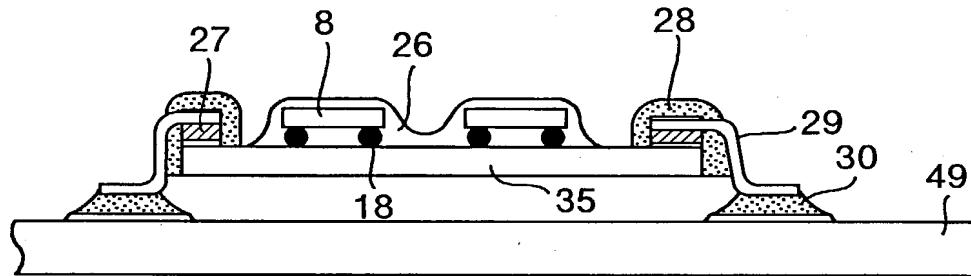
Title: Electronic Device

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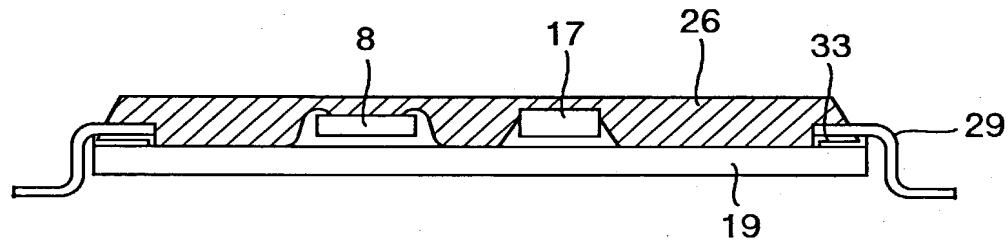
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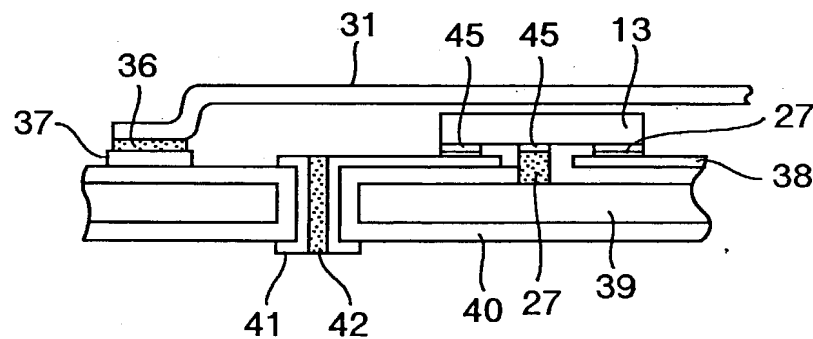
FIG. 5



(a)



(b)



(c)

Applicant: Tasao Soga, et al.

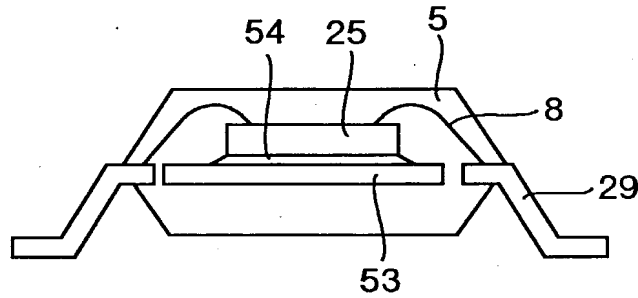
Title: Electronic Device

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FIG.6



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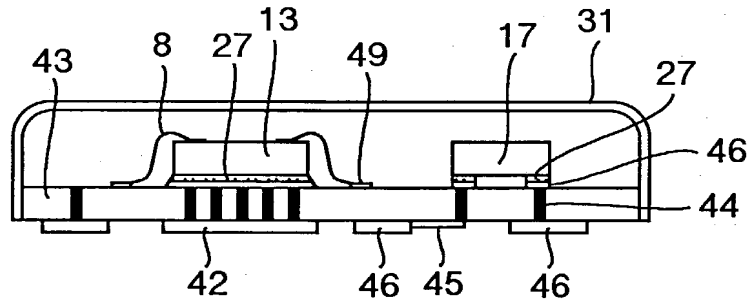
Title: Electronic Device

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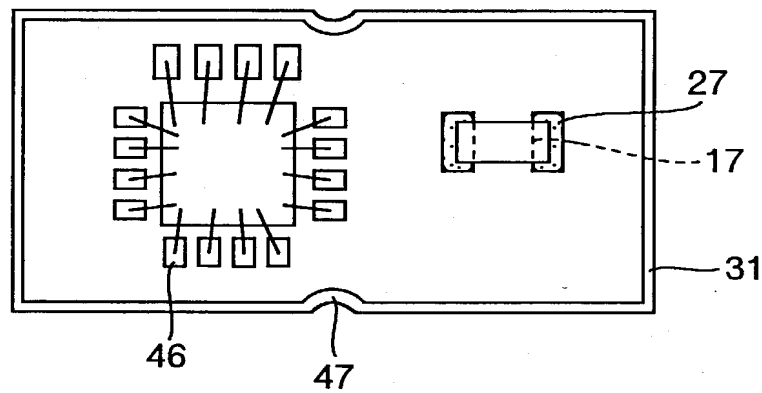
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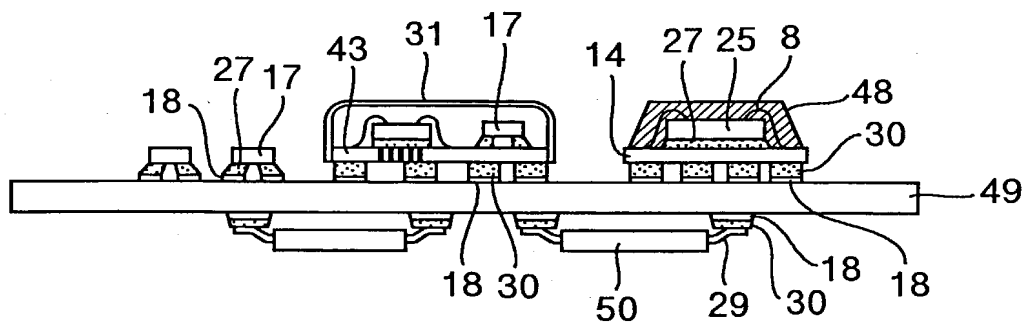
FIG. 7



(a)



(b)



(c)

Applicant: Tasao Soga, et al.

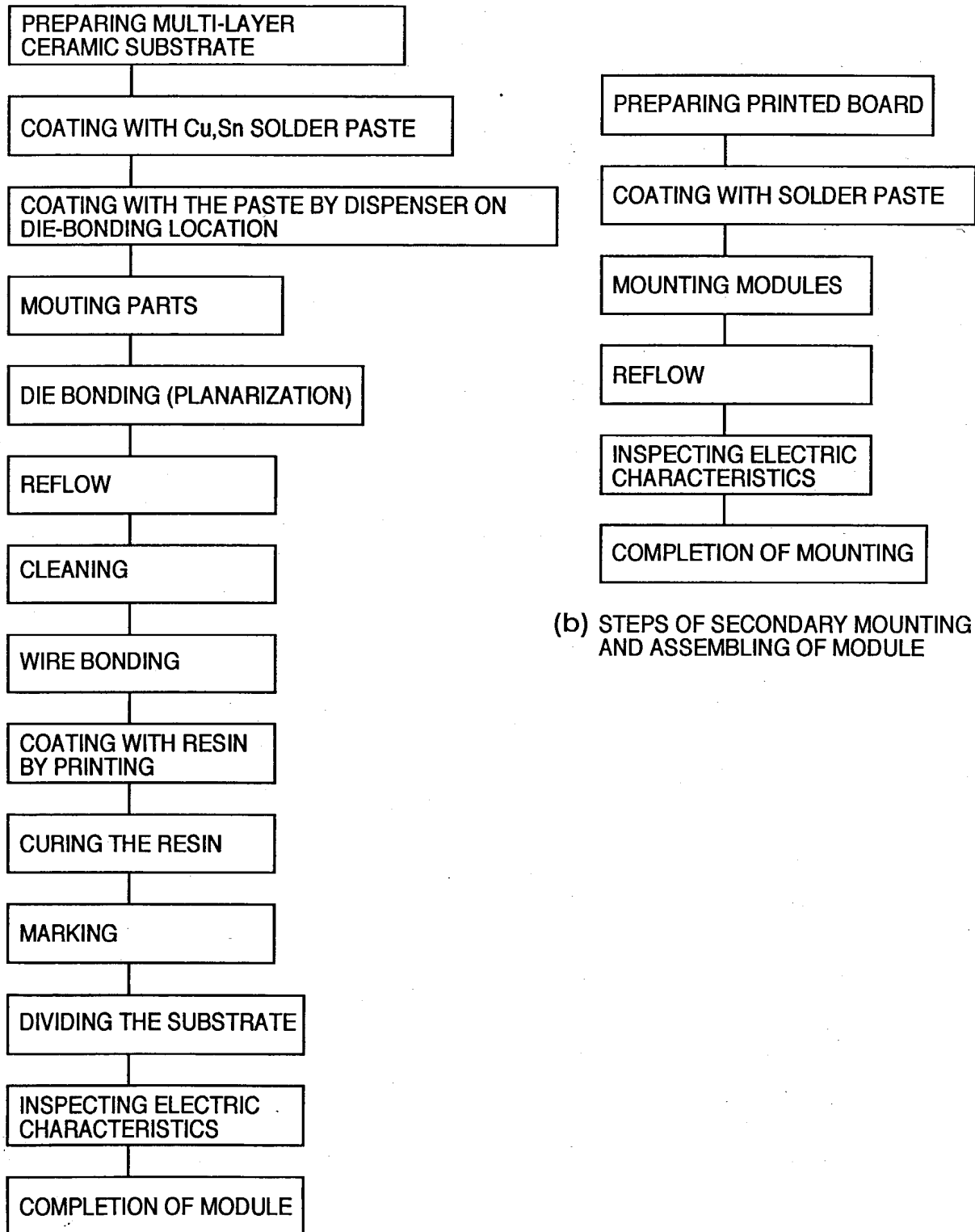
Title: Electronic Device

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## FIG.8



(a) STEPS OF ASSEMBLING MODULE

(b) STEPS OF SECONDARY MOUNTING AND ASSEMBLING OF MODULE



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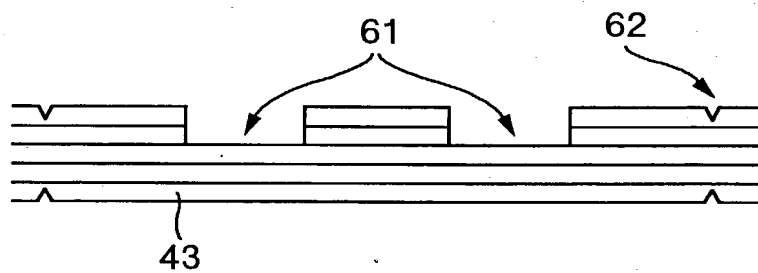
Title: Electronic Device

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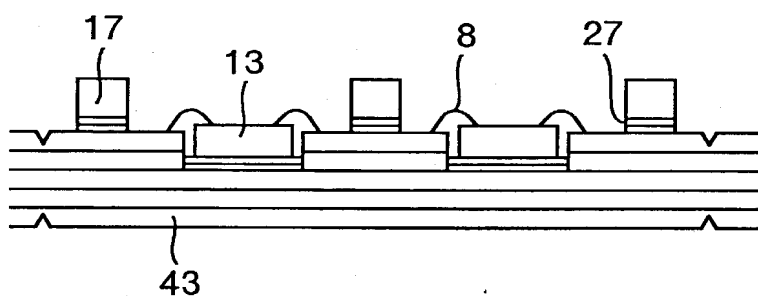
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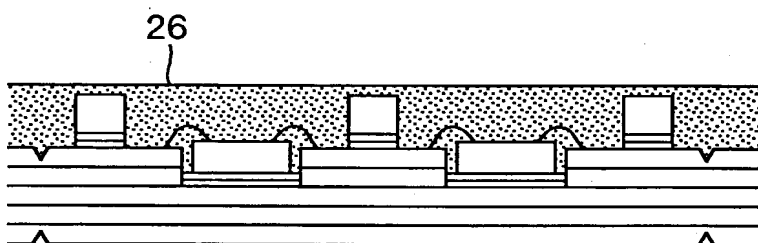
FIG. 9



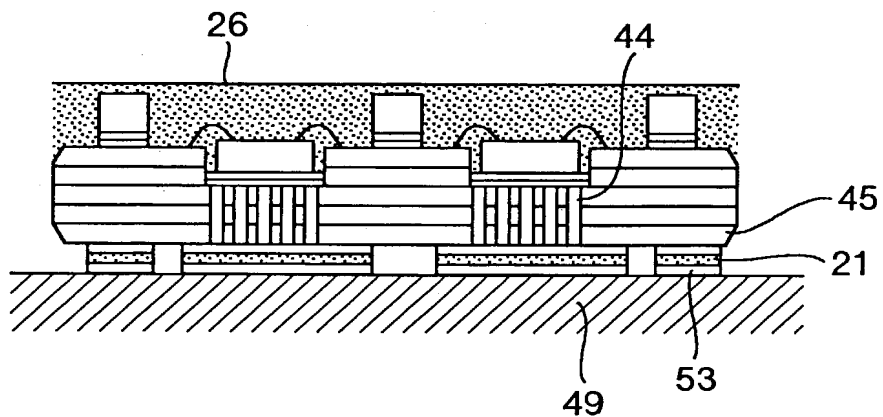
(a)



(b)



(c)



(d)

FIG.10

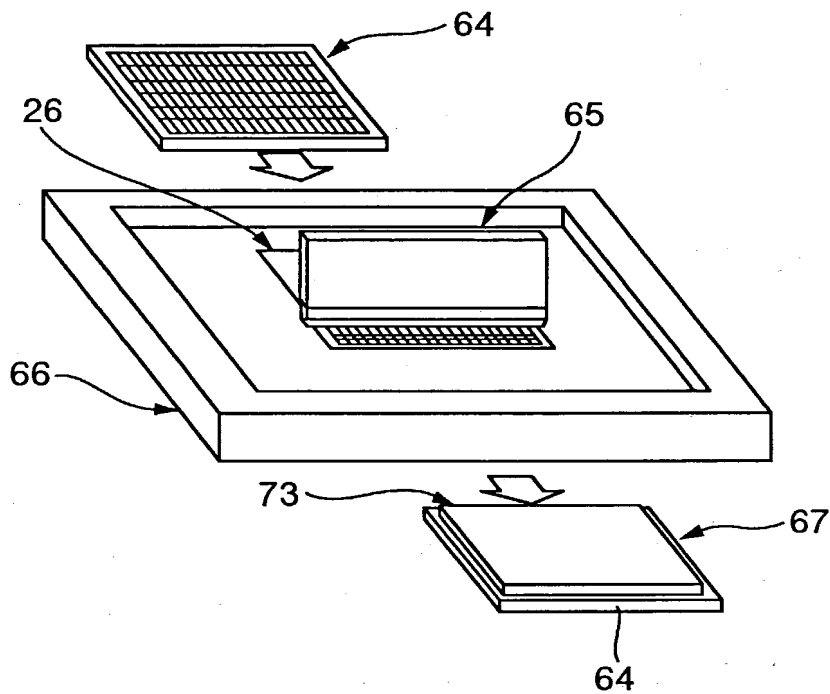


FIG. 11

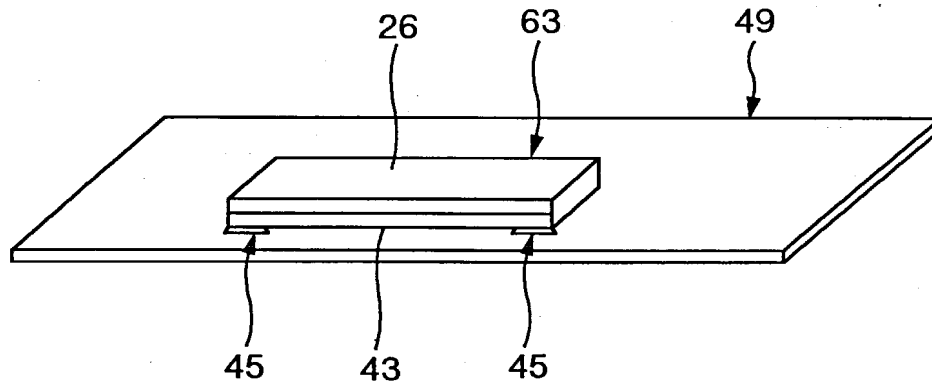
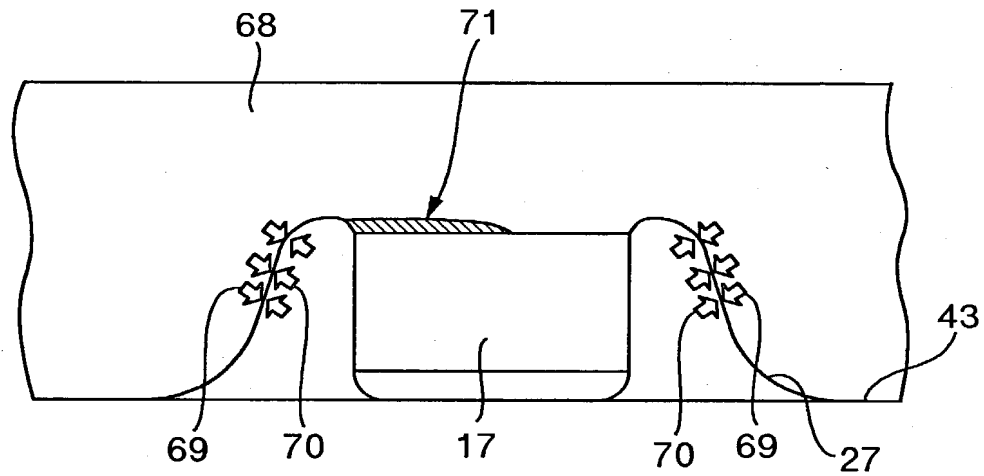
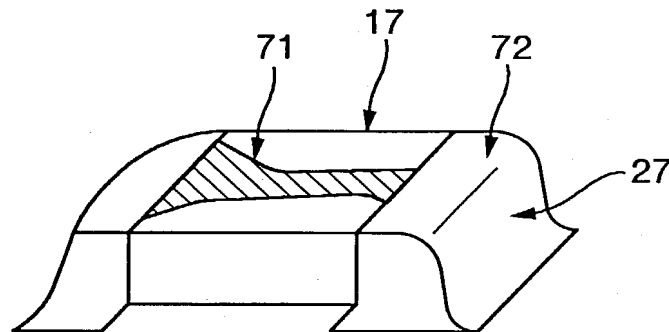


FIG.12



(a)



(b)

Applicant: Tasao Soga, et al.

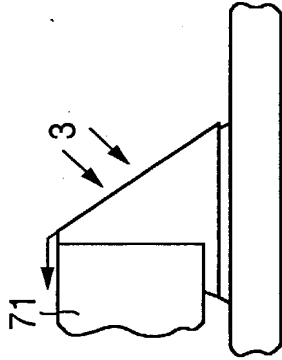
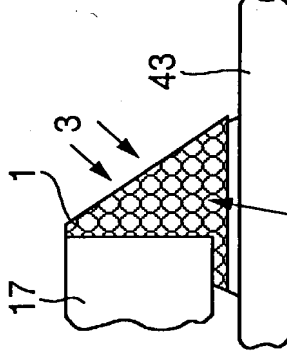
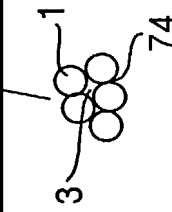
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FIG.13

	VOLUME EXPANSION (%) (RATIO)	YOUNG'S MODULUS REQUIRED IN RESIN	PHENOMENON
CONVENTIONAL TECHNIQUE (PB BASED)	3.6 (2.6)	200 Mpa > at 180°C	 <p>CREEP DEFORMATION OF LIQUID (INCLUDING SOLID PHASE) AT THE TIME OF REMELTING</p>
THE INVENTION (Cu50/Sn50)	※ 1.4 (1)	500 Mpa >※ at 180°C	 <p>JOINT IS EXPECTED THAT A BONDED PORTION DOES NOT MOVE BECAUSE Cu PARTICLES ARE FIXED TO EACH OTHER</p>
ASSUMPTION	※ 1/2 of THAT OF Sn	※ THE VALUE OF CONVENTIONAL TECHNIQUE ABOUT 2.5 TIMES	

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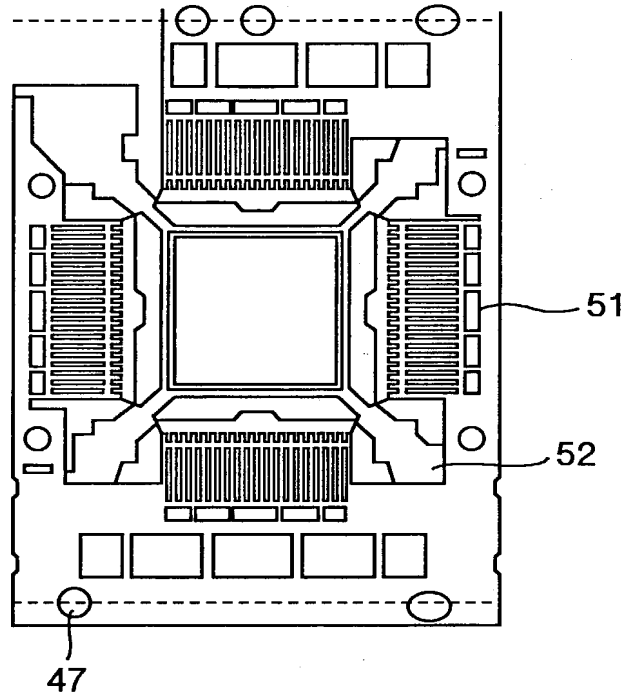
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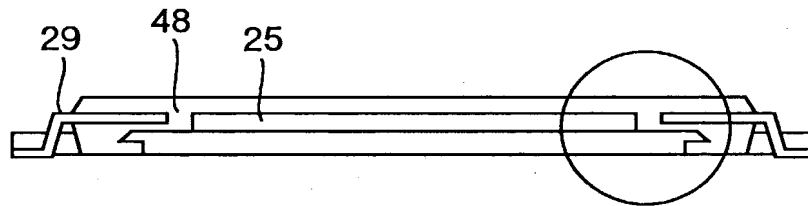
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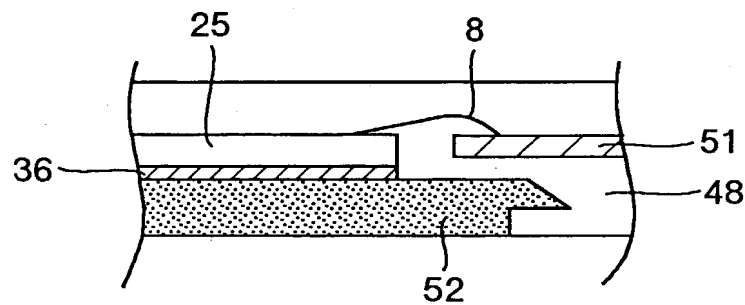
FIG. 14



(a)



(b)



(c)

## FIG.15

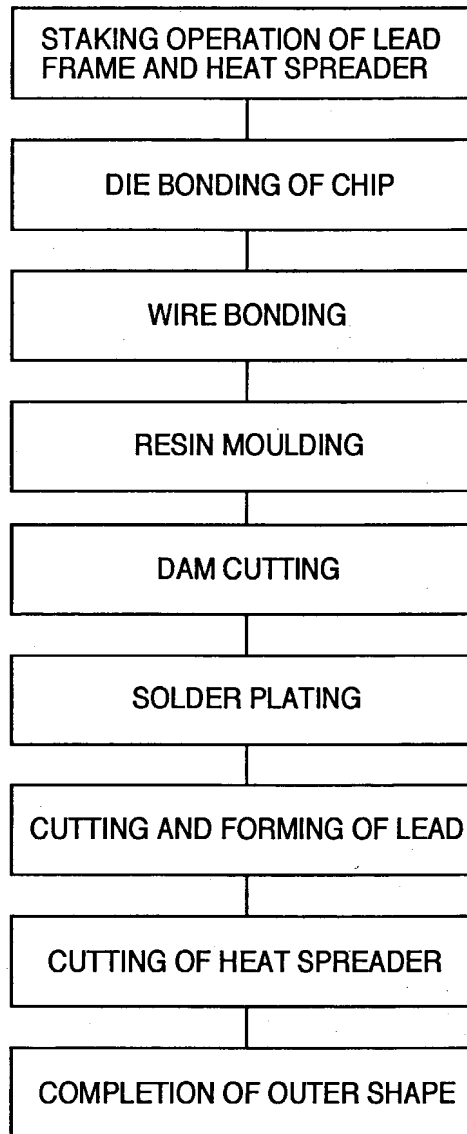


FIG.16

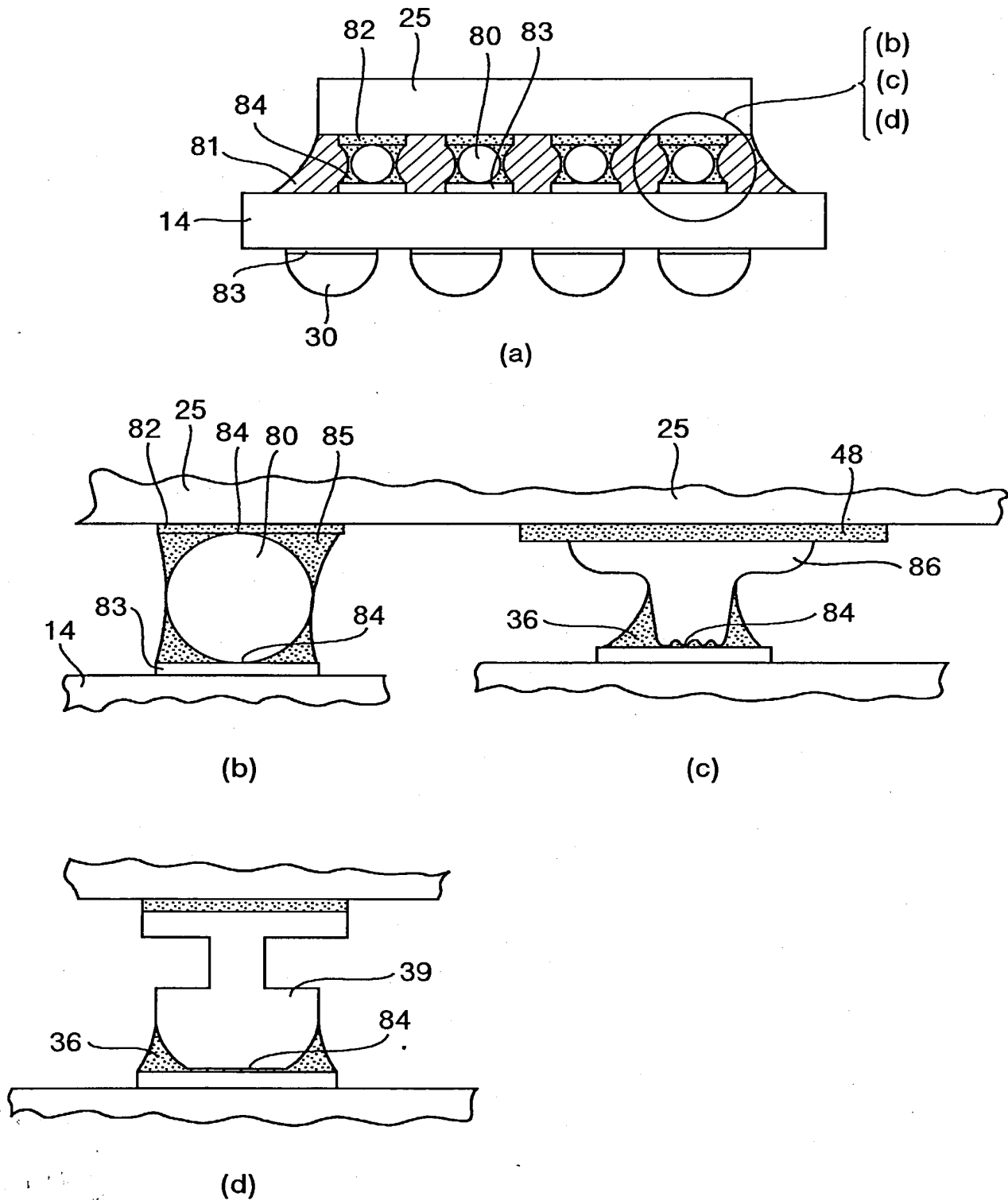
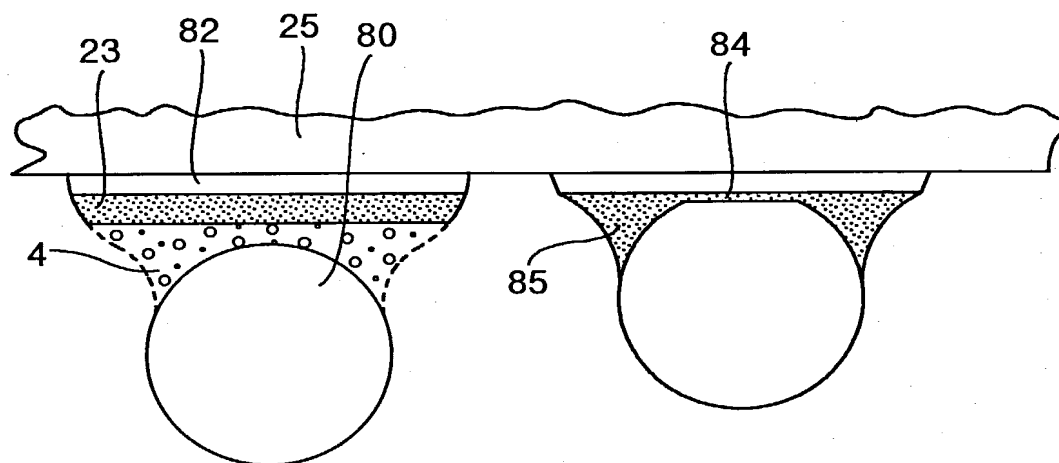
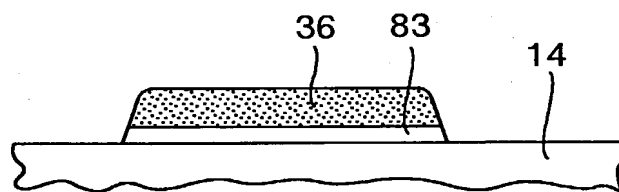




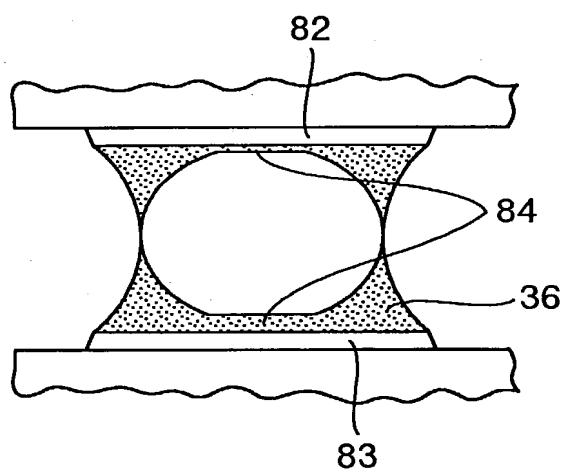
FIG.17



(a)

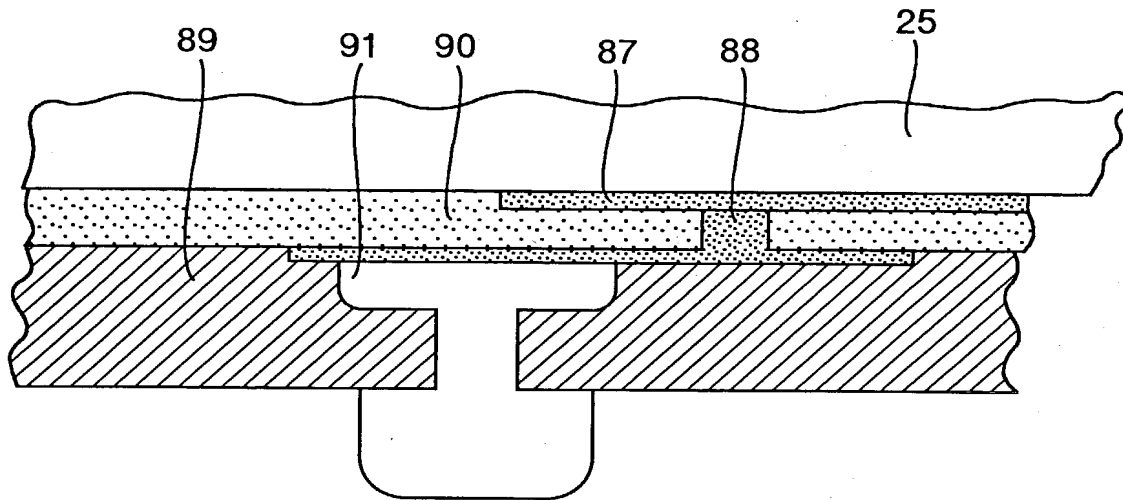


(b)

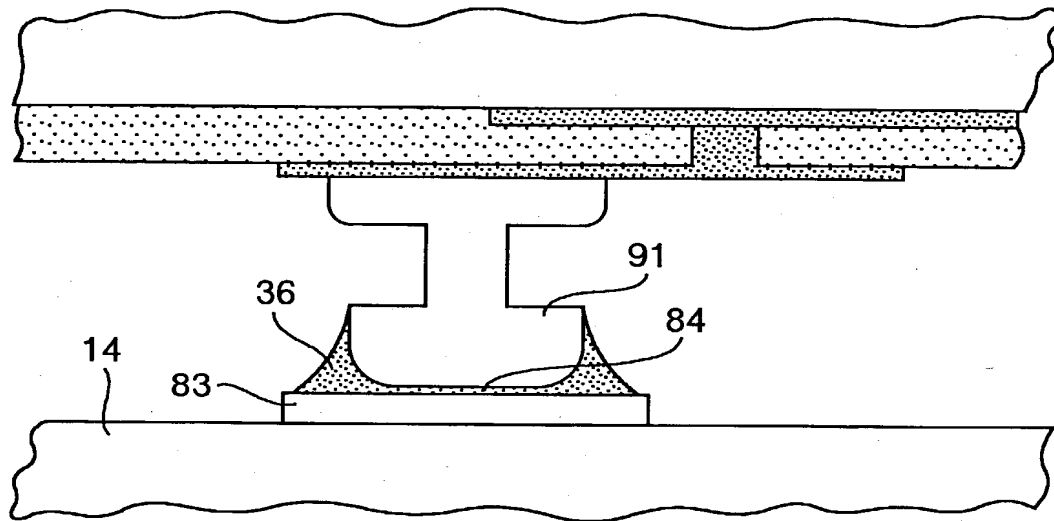


(c)

FIG.18



(a)



(b)

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FIG.19

Sn / Cu	EVALUATION AND JUDGING	REASONS FOR JUDGING
10 / 4	×	↑
10 / 5	×	EXCESS OF Sn
10 / 7 ( 1.43 )	△	<div> <div>PROPER RANGE</div> <div>PREFERRED RANGE</div> </div>
10 / 8 ( 1.25 )	△~○	
10 / 10	○	
10 / 12.5 ( 0.8 )	○	
10 / 15	△~○	
10 / 16.7 ( 0.6 )	△	
10 / 25	×	SHORT OF Sn
10 / 50	×	↓
10 / 100	×	↓

CRITERION FOR : ○ : PROPER  
JUDGING

△ : ALMOST PROPER

× : SHORT (ON EXCESS) OF Sn